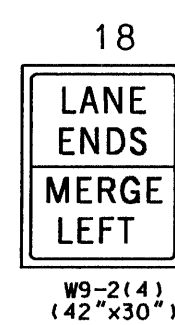
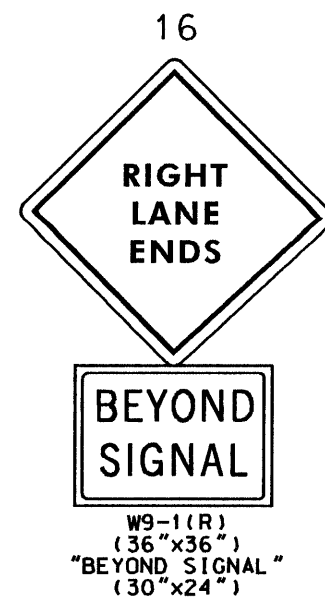
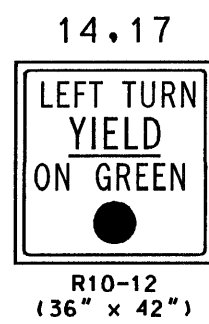
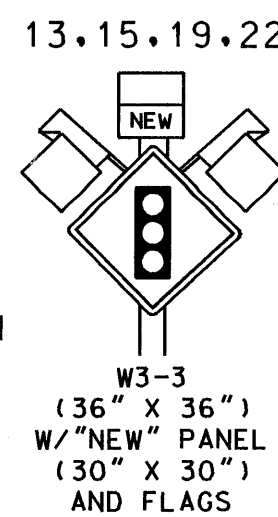
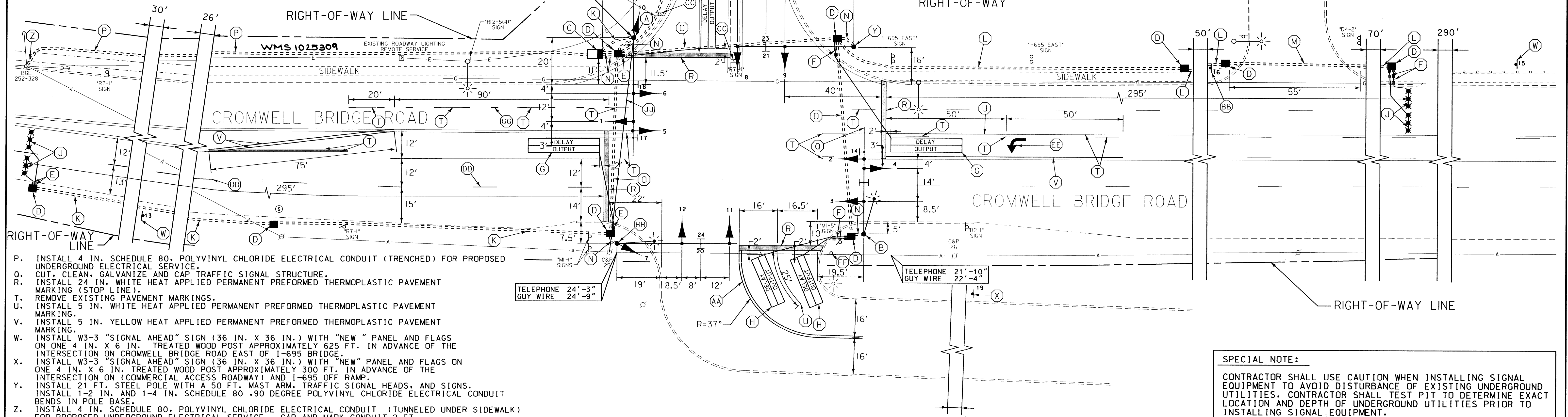


CROMWELL BRIDGE ROAD IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION



#### CONSTRUCTION DETAILS

- INSTALL 21 FT. STEEL POLE WITH A 44 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, AND CLEVIS AND 3 IN. WEATHERHEAD FOR PROPOSED OVERHEAD TELEPHONE SERVICE. POLE MOUNTED SIGNAL HEAD SHALL BE MOUNTED A MINIMUM OF 8 FT. ABOVE ROADWAY. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).
- INSTALL 27 FT. STEEL POLE WITH A 40 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGN AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).
- INSTALL NEMA SIZE "6" BASE MOUNTED CABINET AND CONTROLLER WITH CONCRETE PAD AND CONTROL AND DISTRIBUTION EQUIPMENT. (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN CABINET BASE.)
- INSTALL HANDHOLE.
- INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
- INSTALL 1 IN. GALVANIZED ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
- INSTALL 6 FT. X 30 FT. (3-6-3 WINDING) QUADRUPOLE TYPE LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBING.
- INSTALL 6 FT. X 22 FT. (3-6-3 WINDING) QUADRUPOLE TYPE LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBING.
- INSTALL MICROLOOP PROBE SET WITH 500 FT. LEAD-IN.
- INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 3 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 3 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (BORED).
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (BORED).



- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED) FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.
- CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.
- INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (STOP LINE).
- REMOVE EXISTING PAVEMENT MARKINGS.
- INSTALL 5 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING.
- INSTALL 5 IN. YELLOW HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING.
- INSTALL W3-3 "SIGNAL AHEAD" SIGN (36 IN. X 36 IN.) WITH "NEW" PANEL AND FLAGS ON ONE 4 IN. X 6 IN. TREATED WOOD POST APPROXIMATELY 625 FT. IN ADVANCE OF THE INTERSECTION ON CROMWELL BRIDGE ROAD EAST OF I-695 BRIDGE.
- INSTALL W3-3 "SIGNAL AHEAD" SIGN (36 IN. X 36 IN.) WITH "NEW" PANEL AND FLAGS ON ONE 4 IN. X 6 IN. TREATED WOOD POST APPROXIMATELY 300 FT. IN ADVANCE OF THE INTERSECTION ON (COMMERCIAL ACCESS ROADWAY) AND I-695 OFF RAMP.
- INSTALL 21 FT. STEEL POLE WITH A 50 FT. MAST ARM, TRAFFIC SIGNAL HEADS, AND SIGNS. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TUNNELED UNDER SIDEWALK) FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE FOR USE BY BGE FORCES.
- INSTALL 5 IN. DOUBLE YELLOW HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (CENTERLINE) FOR 75 FT. FROM STOP LINE ON MYLANDER LANE.
- INSTALL W9-1(R) SIGN (36 IN. X 36 IN.) AND "BEYOND SIGNAL" SIGN (30 IN. X 24 IN.) ON ONE 4 IN. X 6 IN. TREATED WOOD POST.
- REMOVE EXISTING R1-1 SIGN FROM EXISTING SUPPORT.
- INSTALL 5 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC SKIP (10 FT. LINE - 30 FT. GAP) PAVEMENT MARKINGS FOR 300 FT. FROM STOP LINE ON NORTHBOUND CROMWELL BRIDGE ROAD.
- INSTALL HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROW.
- REMOVE EXISTING R1-1 SIGN AND SUPPORT.
- INSTALL 5 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC SKIP (3 FT. LINE - 9 FT. GAP) PAVEMENT MARKINGS ON SOUTHBOUND CROMWELL BRIDGE ROAD.
- INSTALL 27 FT. STEEL POLE WITH A 50 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. POLE MOUNTED SIGNAL HEAD SHALL BE MOUNTED A MINIMUM OF 8 FT. ABOVE ROADWAY. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).
- PROPOSED OVERHEAD TELEPHONE SERVICE.

#### LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

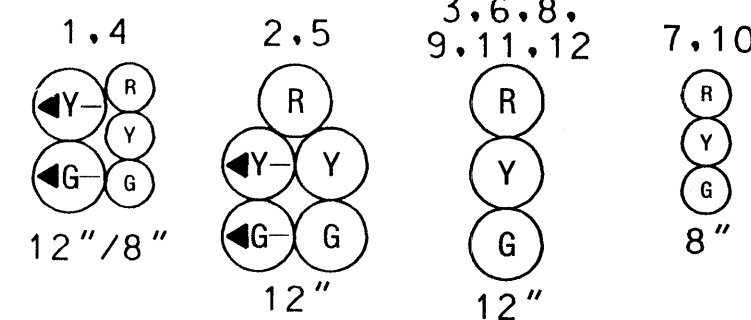
AERIAL CABLE	A
ELECTRICAL	E
TELEPHONE	T
GAS	G
SEWER	SS
STORM DRAIN	SD
WATER	W
CABLE TV	TV

**WR&A**

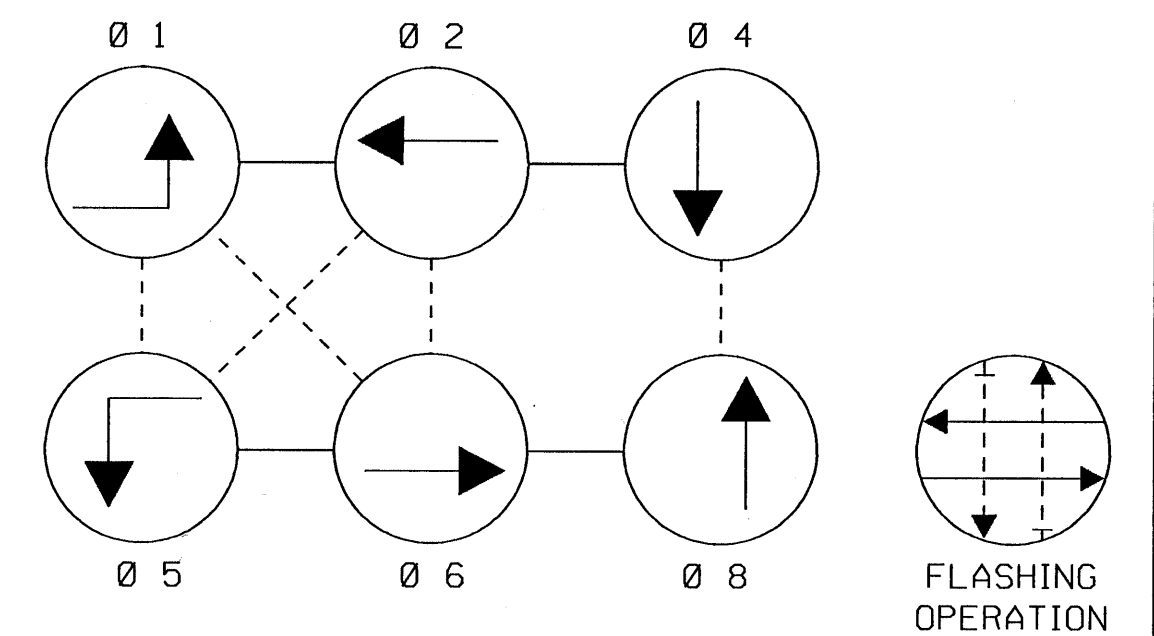
Whitman, Requardt  
and Associates, LLP

801 South Caroline Street  
Baltimore, Maryland 21231  
(410) 235-3450

#### PROPOSED SIGNAL HEADS



#### NEMA PHASING



#### PHASING NOTES:

- PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
- PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

#### GENERAL NOTES

- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- THE CONTRACTOR SHALL NOT CUT MAST ARM AS INDICATED ON PLANS UNTIL MAST ARM POLE LOCATION IS FINALIZED.
- INSTALL CONDUIT AND LOOP DETECTORS PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.
- THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.

#### SPECIAL NOTE:

CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.

#### REVISIONS

#### APPROVALS

*[Signature]*  
TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION

*[Signature]*  
FOR DIMITRIOS A. ZAFIROPOULOS  
ASST. TRAFFIC ENGINEERING DESIGN DIVISION

*[Signature]* 6.20.03  
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

*[Signature]* 6.20.03  
DIRECTOR, TRAFFIC & SAFETY

**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
*Office of Traffic & Safety*  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
**TRAFFIC SIGNALIZATION PLAN**  
**CROMWELL BRIDGE ROAD @ I-695 RAMPS (INNER LOOP)**

DRAWN BY: **B. DONOWAY**  
CHECKED BY: **N. LEARY**  
SCALE: **1" = 20'**  
DATE: **6/20/2003**

F.A.P. NO.  
S.H.A. NO. **XX065385**  
COUNTY: **BALTIMORE**  
LOG MILE: **03.695023.12**

TS NO. **4256**  
T.I.M.S. NO. **F327**

SHEET NO.  
**1 OF 02**